

Cutter (Eph.)

Dr. EPHRAIM CUTTER'S  
COMPLIMENTS,  
248 WEST 44TH STREET,  
NEW YORK.



A CONTRIBUTION TO THE TREATMENT OF  
UTERINE LESIONS, BY IODOFORM,  
COTTON AND MECHANICS.

---

BY EPHRAIM CUTTER, M. D., NEW YORK.

---

Reprint from the Therapeutic Gazette, January, 1882.



## A Contribution to the Treatment of Uterine Lesions, by Iodoform, Cotton and Mechanics.\*

### PRELUDE.

TO attempt a monograph on iodoform, and its therapeutic applications, would be a task of such magnitude as to be out of place here.

The writer's acquaintance with iodoform was made in Paris in 1862, and he has used it more or less ever since. It is very popular among continental physicians, and if the reputation of iodoform here were equal to its character, it would outrank ether and opium, if it were possible. But its literally bad odor, among gynecists, like Sims, has thrown it out of the use it ought to have. Not that a bad odor debars anything from employment, for we have a plant that is loathsome to some, yet millions of our race use it daily, and spend money for it more than for flour. They delight, enjoy and revel in its peculiar odor and taste, and often prefer it to aliment. Tobacco is referred to. Now, to the writer, iodoform is cleanly, pleasant and agreeable. Its beautiful golden color glistens in the sun. Under the microscope it is made up of crystalline, hexagonal plates, hastate Greek-cross shaped, and sometimes peculiarly digitate, with re-entrant angles. The barbs of the hastate crystals explain why they are so difficult to detach when caught on the clothing, and, consequently, why their odor is so persistent, simply because the crystals stick by their barbed points. Taste peculiar, sweet, dry, sulphurous. In the South dentists use it to set loosened teeth (Nunn). To the touch it feels unctuous, ta'c-like. It makes no impression on the sense of scound. Its peculiar, pervading smell makes it a subject of query. Since most gynecological cases dislike inquiries as to themselves, or to have anything about them that may raise suspicion as to the nature of their complaint; and, on the other hand, those like Dr. Sims say the objection is because of its making the physician malodorous: hence iodoform has been tabooed.

Nothing opposes its laryngological use, as it is quite in order to have diseases of the throat subjects of society discourse. Hence such men as Elsberg apply the ethereal and chloroformic tincture, combined with ol. menth. pip., freely to the air passages, with the best effect. There is no more soothing, quieting and anodyne throat application, for topical pain and soreness, than that of the ethereal tincture of iodoform, applied with an Elsberg holder.

Again, it is one of the best applications to irritable dermal ulcers. About the year 1865 a man had an exceedingly painful, irritable ulcer of the

leg, just above the ankle. It was as large as a silver half dollar. Edges perpendicular. Bottom of excavation, raw and purulent. The leg was laid horizontally, and the cavity filled with powdered iodoform. A piece of lead adhesive plaster, large enough to go half around the leg, and three inches wide, was warmed and applied over the ulcer and iodoform. Orders were left to leave it undisturbed till the writer's next visit, which was in four days. The pain ceased soon after the application. The ulcer had not discharged any, and had given no trouble whatever. On removing the plaster most of the iodoform had been absorbed, and—it can hardly be believed, it is so incredible—two-thirds of the excavation was filled up, healed over even, and covered with sound skin! Dr. Charles Haddock, of Beverly, informs the writer that he has had exactly the same experience. Dr. James H. Salisbury, Prof. Nunn, of Savannah, Ga., and some French physicians, confirm this history, so that it is no exceptional experience, but must be regarded as a legitimate and natural therapeutics. So that iodoform must rank with the very foremost of remedies, as a healer of ulcers, a quieter of pain, and a restorer of organic lesions.

Before this the writer used it in ulcerations of the uterus, as others did, mixed with cocoa-butter as a suppository; but, after the experience given, the vehicle was dispensed with. The accompanying instrument was devised with a spring catch, which, when released, threw the powder out. But the powder would engage between the cylinder and the piston, and stick, causing the piston to work too slowly, and not project the iodoform with force enough.

*Second device.*—Suggested by Dr. C. W. Stevens, 54 Elm street, Boston, Charlestown district. He used copper tubes, one half inch or more in diameter, curved (in a quarter circle), ten to twelve inches long, really a vaginal insufflator; the end of the tube, charged by pushing into the collection of iodoform, was introduced through to the os, then withdrawn one-half inch, and the current of air forced in by the mouth of the patient, depositing the iodoform against the uterus.

There is, however, a nickel-plated tube made for this same purpose, and fitted with an india-rubber tube, twenty-four inches long, terminating with a glass tube; calibre inside of all tubes, one-half inch. This device works well, but the iodoform revealed its presence unpleasantly by often getting outside the vagina.

After, however, absorbent cotton came out, an elegant preparation of it by Dennison & Co., 19 Milk street, Boston, was brought before this society. This preparation, sub-

\*Read before the Gynecological Society of Boston, November 3, 1881.



jected to a careful morphological examination by a skilled botanist, revealed no difference of form from that of ordinary cotton. The absorbent property was found to be due to the removal of the minute film of cotton seed oil from the fibre by ammonia, soda, potash, ether, chloroform, etc.

At once this seemed the right agent to stop the smell of iodoform—that if applied to the os, in quantities of a half-drachm, or more, through a speculum, and a pledget of this absorbent cotton crowded down through the speculum, and held there when the speculum was withdrawn, the pledget would remain, and act like a dry sponge to absorb the secretions and iodoform; and that if the cotton was removed when it was saturated, or just before saturation, and fresh cotton substituted, there would be no odor of the iodoform to exhale. These suppositions were realized, and there has been no trouble since, save when the patients were

spares the sensitiveness of subjective feelings in vaginal exploration.

The capsules may be filled as follows: A toy pewter spoon or a common steel pen put point into a holder serves to shovel the iodoform into the larger division of the capsule. When filled the cap is fitted on, and thus the iodoform can be handled and introduced into the vagina by the patient. She then takes a pledget of absorbent cotton and plugs the vagina. To facilitate the removal of the pledget when saturated, a thread may be attached beforehand. The writer has thought that the capsules might be filled by the apothecary in quantities of 3j, 3ss, 15 grains and 7½ grains.

Also, that cotton and iodoform might be embraced in one capsule. This idea is already in the market.

Also, in connection with divided capsules, to

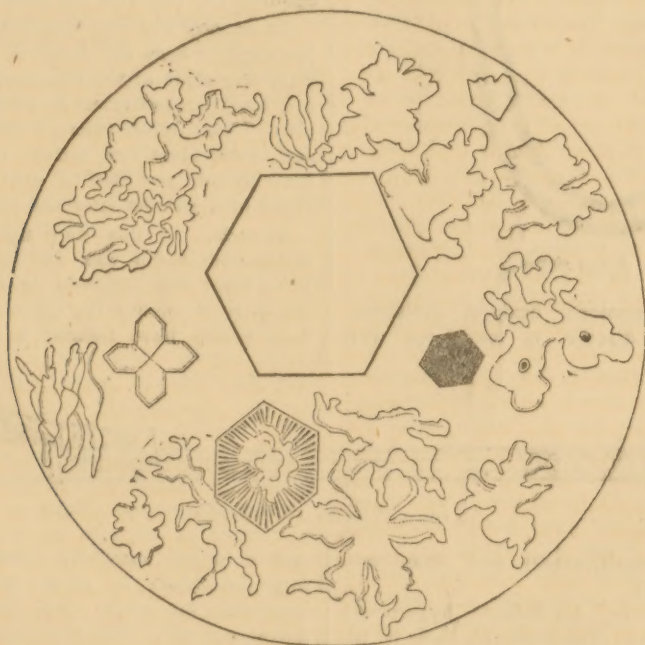


FIG. 1. IODOFORM CRYSTALS, X 800.

careless and allowed the cotton to be saturated without removal.

This mode of application is the common one, and requires the attention of the physician in person, usually twice a week. But there is a great improvement (not patented) on this method, on which special stress is here laid. It was first suggested to the writer by an advertising doctor, whose wife was in my care for a uterine cancer, originally a fibroid. He asked if the gelatine capsules of Planten & Son could not be filled with iodoform, applied to the os, and the gelatine dissolved in the vaginal secretions, thus making a topical application. The idea was taken in at once and proved admirable in practice. Thanks are here given for the suggestion.

The points are that the patient can fill the capsules herself, and make an application without assistance. It enables those in limited circumstances to avail themselves of the remedy. It relieves the attendant and saves his time. It

have undivided capsules complete in one cell. Then the most sensitive patient could not complain of the trouble in preparation.

In order to have all preliminaries satisfactory, the writer applied to the enterprising and reliable firm of manufacturing chemists, Parke, Davis & Co., of Detroit and New York, and they have consented to furnish the iodoform in capsules, ready for use in the quantities suggested, to wit: 1. 7½ grains; 2. 15 grains; 3. 30 grains; 4. 60 grains—samples of which are shown here, held at the following prices: In boxes of 100 capsules—1. \$2.50; 2. \$4.50; 3. \$8.50; 4. \$16.00.

They also furnish pellets of cotton, salicylated, ready for use, in loose, textile cloth, samples of which are shown. They also will furnish 20 grains iodoform, with absorbent cotton, in one capsule, at \$12.00 per 100; 5 grains each, at \$2.25 per 100; 30 grains each, at \$15.00 per 100.

In this iodoform cartridge are all the requisites for one application,



## SUBJECT PROPER.

Hyperæsthesia — supersensitiveness — the irritation of Hodge—must be regarded as a disease by itself, and associated with inflammation, ulceration (ectropium, eversion, solution of continuity, sub-involution), with metritis and hyperplasia, and

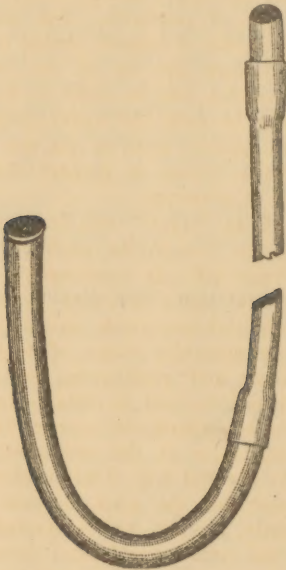


FIG. 2. CATCH PISTON.

with displacements—versions, flexions, prolapsus. Sometimes uterine disease is associated with

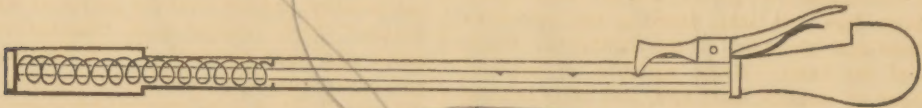


FIG. 3. VAGINAL INSUFFLATOR.

hypoæsthesia (sub-sensitiveness) and anæsthesia (loss of sensitiveness).

Again, hyperæsthesia, ectropium, hyperplasia and displacements are associated, so that if instances of the treatment of the hyperæsthesias, of ulceration, and of hyperplasia, precede the instances of treatment by odorless iodoformization, it is hoped that the apparent digression will not appear out of taste.

*Case 1.* Hyperæsthesia and ulceration of the cervix, that was improved under iodoform, but finally proved to be fatal as a cancerous lesion.

"Mrs. "One," married, over 50 years of age, residing in Louisiana. Summer of 1867 applied to the writer for treatment for what was called cancer of the womb by her local physician; and one in New Orleans. She presented a good physique, but had copious bloody vaginal discharges; sometimes, not always, with severe pains, with the cervix enlarged laterally, ragged, rough and bleeding, but not dense or stony; rather soft and punky to the touch. Uterine cavity normal depth. Appetite unimpaired, etc., etc. Before her trouble came on, a year previous, she was a subject of intense grief on account of a relative, which shattered her nervous system, and almost

drove her distracted. Immediately she was treated with iodoform and cotton, applied to patient while reclining in a Cutter's invalid chair, in a position where the diseased cervix was exposed to direct sunlight through a Neugerbaum speculum. The iodoform was literally shoved in by a vaginal sound, and the whole cervix buried in the powder. A large pledget of the cotton was introduced, and the speculum withdrawn, the cotton held in place at the same time with sound. The effect of this was like magic. The pains, the bloody flow, and the discharges, ceased at once. The surface looked less red and angry. Applications were made twice and thrice a week through the summer, with the result that the ulceration was healed, or nearly healed. All the while she was partially on the Salisbury plan for cancer. The result was that she thought herself cured enough to go home. Certainly, as far as signs, symptoms and feelings were concerned, her situation coincided with her opinion, but not with the writer's.

Reluctantly she was dismissed, with strictest injunctions to have the iodoform reapplied, if there were any signs of the reappearance of the disease, and also was instructed to keep continually on the plan. But these instructions were disregarded, and, soon after her arrival home, she relapsed, grew worse, and died of cancer of the womb in about nine months after she left the north.

*Remarks.* At this time the capsular mode of self-administration was not known to the writer. From what has happened in other cases since, in the writer's opinion, the continued use of the iodoform would have insured a longer lease of life,

and a longer immunity from suffering. At any rate, the history, as given, taught the writer that iodoform, for such cases, has advantages over galvano-caustic, actual cautery, scraping with the curette, and operative interference, especially since it can be applied by the patient herself, under medical advice. Had this patient remained longer and been cured, of course it would have passed for anything but cancer, from the very fact of the cure, but, as the history shows, it was cancer, favorably modified, and relieved for a time by the use of iodoform. Of one thing the writer is sure: That any remedy that will do as iodoform did here is entitled to consideration from gynecologists.

*Case 2.* Mrs. "Two," 45 years old, married, mother of nine children; severe, stinging pains about the vulva, associated with copious leucorrhœa; laceration of cervix; redness, infiltrated and dense nodular enlargement of posterior lip of uterus. Behind the uterus were three or four well-marked, dense, mobile, marble-like tumors, beneath the mucous membrane, the touch of which suggested cancer. Cancer being hereditary, the patient's father having died of cancer of the stomach, and her maternal great-grandmother of cancer of the breast, fears of malignancy were expressed,



especially as the pain was severely lancinating at times.

She was treated much as case I, and recovered, and is living now at the expiration of four years. The tumors soon disappeared, the uterus returned to normality, as far as was possible, without an operation for the ectropium, to which the patient would not consent. Had death ensued, this case would have been called cancerous, but, as it recovered, of course it was not. (?)

Case 3. Hyperæsthesia; fœtid intra-uterine ulceration; latero-flexion to the left, mistaken for a fibroid. Treatment with iodoform.

Miss "Three," 24 years of age; syphilitic, both from confession and blood-examination; general malaise; complexion, ash color, formerly ruddy; vaginismus; uterus, too sore to examine with sound; iodoformization; Salisbury plan for fibroid; fœtid discharge checked; uterus mobile and sinistro-latero-flexed, angle  $1\frac{1}{2}$  inches from os; complexion restored; great gain in flesh; amenorrhœa supposed to be caused by the iodoform; tannin substituted for iodoform; return of menses.

This was actually a "stinking" case. Odor pervaded the house and office: Still it was subdued by the faithful use of iodoform. (A gentleman present, when this paper was read, said he knew of a case where iodoform was used extensively for eczema of the limbs. The amenorrhœa was attributed to the iodoform.)

Case 4. Mrs. "Four"—over 50 years of age, multiparous, subject of retroversion—complains of pain in abdomen every time she takes a step. Hyperæsthesia of abdominal skin; numbness in both legs and feet; menstruates. Æsthesiometry: Could distinguish two points, one-half inch apart, over both legs and feet, showing the subjective and functional character of the numbness. Palpitation of the heart. Great agitation of manner, and signs of insanity from talk, and other actions. The uterus was enlarged, thickened, exquisitely sore to touch, and too sore to be explored by sound. Vagina hot. In former times the writer would have used leeches; still, by the capsular use of iodoform and cotton combined, with confinement to bed, she was relieved of the symptoms in a few weeks.

3. The use of iodoform in uterine hyperæsthesia—the "irritation" of Hodge—associated or not with lesions of organic structure—the cases that seem to the writer to make up the largest class of uterine disease. Generally found associated with versions, flexions and prolapsus of the uterus, with tumors, and organic disease, etc.

Perhaps, in this connection, the writer may be pardoned for an allusion to his "Contribution to the Treatment of the Versions and Flexions of the Unimpregnated Uterus,"\* intended for those who use the writer's pessaries. In this work great stress is laid on the necessity of preparing the patient for the pessary. Mention is made of the iodoformization, but the great reliance is laid on the use of depletion, by leeches, or scarification. Since then the writer has, to use a good Methodist word, "realized" the supreme value of iodoform over all other agents, in the reduction of the

hyperæsthetic vagina, uterus and appendages, to a state of normal feeling (agathæsia—*αγαθός*, good, *αἰσθησις*, feeling), so that the uterus can be handled with a sound, and sustained by a pessary, selected by measurement. It seemed to the writer that the neglect of the preliminary treatment, before the introduction of a pessary, has brought, undeservedly, a disrepute upon the use of pessaries. The unimpregnated uterus and vagina, if normal, should have no more sensitiveness than the tip of the healthy nose. For these reasons, and in order to bring the subject fairly up to date, the writer would beg leave to make an especial point of the use of iodoform and absorbent cotton, to prepare the patient for the wearing of pessaries.

Case 5. Miss "Five" will illustrate this better in the concrete than in the abstract. Unmarried, virgin, 34 years old. Is consumptive, as evidenced by the physical signs furnished by macroscopical and microscopical inspection, auscultation and percussion. Pretubercular stage. Complains of general weakness and prostration; inability to walk or exert herself, beyond a certain limited degree; no pain, no anæsthesia, or hyperæsthesia; on particular disturbance at the menstrual epoch. So that neither she nor any of her medical attendants could account for the great nervous prostration, and, curiously, no one had suspected the uterus. Certainly, the systemic and local diseases were insufficient to account for the prostration.

Acting on the dogma of the late Prof. Hugh L. Hodge, my instructor in gynæcology, in 1854, that "no woman complains unless she is sick, and has reasons;" and "that if we (his pupils) were unable to find out the cause of sickness—to confess our inability, and not treat the patient as malingering. Rather," Prof. Hodge said, "lament your ignorance and spur yourself to find out the trouble, and never cease until you have thoroughly explored the case." So, on exploration, vaginismus, with a retroverted and hyperæsthetic uterus, were found.

Now, before the uterus could be replaced, or even touched with a sound, it was necessary to relieve the vaginismus, and restore the uterus to as insensitive a condition as the tip of the nose, when it could be handled. With difficulty iodoform capsules, with cotton were applied by the writer, and the necessary physical contact caused severe pain. These were applied once in three days, so that in about two weeks the writer was enabled to introduce the uterine sound, and restore the retroverted uterus, and obtain the measure for a Cutter retroversion loop pessary, which was soon procured, applied, and continuously worn ever since, without any trouble, up to the present time, a period of five months. The feeling of prostration has almost ceased, and the patient is making a good recovery on the Salisbury plans.

Remarks. The writer knows no other agent by which this could have been accomplished so speedily and satisfactorily. He thinks enthusiasm is not out of place when connected with iodoform. If it were in order here to show the importance, in cases of consumption, to look to the uterine complications, space for this paper would be insufficient; perhaps it may make the subject of future communication. It is enough to say that it will not do to overlook uterine complications in

\*Boston: J. Campbell & Co., 1877.



consumption, as the combination is very formidable. In the present case the writer has no doubt that the uterine complaint accelerated the pulmonary.

*Iodoform and the Cutter stem pessary.* The statement that no stem pessary can be worn is not in harmony with the fact that the writer has seen a case where the above instrument has been worn for five years successively successfully, and with relief from prolapse of the ovaries, and also for a year to four years' wearing in other cases of flexions and versions. But, if it were generally known that iodoform paves the way for the use of the above stem pessary, perhaps there might be less confidence in the idea of the absolute impossibility of wearing said pessary.

As the writer's relations are close to the instrument in question, it may be proper to give in detail the use of said pessary, and to state how the barriers are overcome that appear so insurmountable. We testify, as Stanley witnesses to his discoveries in Africa. Are not stem pessaries to gynecologists a "dark continent?"

*Case 6.* Anteversion, complete, chronic, and uterus sensitive—Iodoformization—Restoration of normal sensibility to vagina and uterus—Application of a Cutter stem pessary—Continuous use for twelve months—Restoration of embonpoint, vivacity, ambulation, travel to Duluth, and good health.

Miss "Six," 24 years old, virgin; was drooping, pale, feeble; fond of dancing, but unequal to the labor involved. Suffered much during menstruation. Nervous. Appetite poor. Father died of consumption. Local trouble: anteversion, with hyperæsthesia of the uterus and vagina. After iodoformization, it was replaced and measured with vaginal sound for an anteversion Cutter loop pessary. This kept the uterus in position for a time. There was some discomfort, occasioned by the uterus forming an anteflexion over the pessary. In such cases the Cutter stem pessary is advised: 1st, as it keeps the uterus from flexing, on true mechanical principles; 2d, holds the organ in perfect position, easily and readily; 3d, is not apt to get out of order; 4th, is under the control of patient, as she can withdraw it by simply extracting it; 5th, it, when borne, requires less attention than any other pessary; 6th, when worn, the uterus is mobile, but within normal limits.

Iodoformization was kept up and a stem pessary applied, the patient lying in bed, as a precaution, undressed, as if sick. The instrument was well borne. This was verified by occasional digital examinations, and the vagina found to be cool and the uterus in place. The sensitiveness of the uterus was tested by pressing in the pessary outside, and also the abdomen. The iodoformization was kept up by the capsules passed up by the side of the body of the stem. There was some flowing beyond the menstrual period (the instrument is not removed during menses); but, as there was no pain or soreness of the womb, no tenderness of the abdomen, no fever, nor anything but the hemorrhage, which was slight, no change was made in the instrument, so that Miss "Six" has worn it up to the present time without trouble. She lives on a very high hill, nearly a mile in ascent in one direction. This she climbs and descends at will. Also goes into society, and the

way she came beaming into the writer's office, to have her face beautified by the removal of a small mole on her chin, would startle one who insists that stem pessaries cannot be worn. Besides, her breasts have filled out, and her form has rounded out, as it would have done, in all probability, had not her development been stunted by the strain upon her system, "to run," so to speak, her womb in its anteverted and irritable condition.

The writer confesses that the general opposition to the use of any stem pessaries has deterred him from always employing them when indicated; but the present cases, with others, makes him think he ought to respect his own opinion and experience more than that of those who, more eminent in all respects than himself, yet condemn the stems *in toto*. But now that iodoformization is available, it is to be hoped that the blank opposition may be revised, for the pleasure that is realized in the restoration to health and active life, in the present case for example was one of the sweetest that has fallen to the writer's lot as a physician. It should be stated that the stem used had a moveable disc, which is regarded and found to be a great improvement on the fixed disc, though Dr. Sanford Hanscom, of East Somerville, Mass., says his sister, who has the prolapsed ovaries referred to above, removes and applies the stem herself, and likes the fixed disc much better than the stem with the movable disc.

*Case 7.* Showing that iodoform does not regulate every case.

Mrs. "Seven." After this patient had got well-nigh relieved of her uterine enlargement and inflammation, a change came over her in relation to the iodoform, which should be related in this connection. She found herself suffering more after the use of iodoform, and finally, by a crucial test, she decided that it made her bowels hard and peculiar in feeling, and rather distressing, so that she would no longer use it. Now, the writer found it difficult to believe that the iodoform, from being benign, could become nocent; still, having confidence in the patient, he feels forced to admit the truth of the change of character from good to bad.

*Remarks.* This is seen in the case of parasitic cryptogamic vegetations. Innocuous fungi may become animalized and then also be nocent, and cause diseased conditions, as the botrytis of the potato-rot may become animalized, nocent, and cause diphtheria. Also alcohol changes its character in sickness and disease. The writer had once a case of chronic erysipelas of the right leg, which spread beyond the knee joint, and involved an amputation at the middle part of the thigh. Pulse, 140. The only food this patient took during this time—a period of three months—was one and one-half pints of whisky daily. Vouchers for this can be furnished. Still, when convalescence was established, and, even after recovery (the man is now alive, and several years have elapsed since his sickness), he could not take a teaspoonful of whisky without its going to his head. Besides this, it was very repugnant to his taste.\*

\**Note.*—Another case has occurred to the writer since this was written, when iodoform, that agreed well with others, burned and scalded badly the vagina. This is inexplicable, but it is clinical history, and should not be suppressed.



At any rate, as the patient was very much better, and called herself well, the writer was very willing to discontinue the iodoform, and to record, that iodoform, after being used with success, became an agent of distress, as the alcohol did in the remarkable case alluded to. Still, should the same lady have a similar experience, iodoform would be indicated, as before, under the guidance of a physician.

Case 8. Mrs. "Eight," 42 years old; multiparous; flooding; pale; confined to bed; hyperæsthesia of abdomen, vagina and uterus; pelvis packed firmly. Supposed fibroid proved to be retroflexion and version. After iodoformization, introduction and use of stem pessary. This case was very sensitive, else a sound introduced would have corrected the diagnosis at first. She is now wearing the stem well. Without iodoform this would have been impossible. The capsular method was employed, with no trouble to those in the house.

Case 9. Mrs. "Nine," 34 years of age. Abdominal, pelvic, interstitial fibroid. This patient complained of being hurt on walking, so that locomotion was quite abandoned. It seemed as if the whole uterine growth was sensitive to the motion of ambulation, though not so on digital exploration. Capsular iodoformization relieved the symptoms. The following extract, from a late letter of this patient, gives her version of her history: "I have had the iodoform applied all of the time. I do not think it possible for any one to have less trouble from wearing it than I have had. I wear the capsule and cotton a week without removal, not experiencing any unpleasant odor, only as it is inserted and removed. Had I better try to do without it, if I don't realize sensitiveness there? I do not think I could walk as much as I do, if it was not for iodoform."

The question was answered: "Yes."

More cases could be adduced, but the above seem enough to illustrate the positions taken.

*Is iodoform absorbed?* When applied en masse to the uterus, so much remains undissolved that it is pertinent to ask if it acts by absorption, or simply by contact, as we used to think the subnitrate of bismuth acted on the stomach, but in which the mistake is shown by the relief following the use of liquid bismuth. Patients have spoken of tasting the iodoform in their mouths, after its deposition in the vagina—which is good evidence of absorption. The following case, in the opposite sex, shows it can be absorbed from the rectum:

Mr. "Ten"—30 years old, 10 years sick, pseudo-semenal emission, enlargement of liver, atrophy of both testicles, neurasthenia, sweating almost without provocation, headache, general malaise, loss of flesh, hyperæsthesia of integument, etc.—was requested to use 15 grains of iodoform in a gelatine capsule, deposited in the rectum at night, on going to bed. The report was that the iodoform irritated the rectum, and that, while he could perceive no smell, he could taste it all night. Less quantity was substituted, the pain was relieved, but not the taste. This case was so sensitive that he could not bear the open air in June without a profuse sweating. Now it is impossible to resist the conclusion that the iodoform was actually absorbed, and entered the circulation, as he was not warned beforehand. All cases do not have this experience, pos-

sibly because their nervous systems are not sensitive enough to observe it.

Oftentimes the acrid burning of iodoform is due to some physical difference in the preparation, for the preparations vary in this respect.

*How does the iodoform act?* By its effect on the nervous system evidently. This is the system, *par excellence*, to be acted on in gynecological cases. It controls irritation, the rapid waste and reproduction of tissue elements in the body. It is a difficult phase of the subject, but it forms a part of the clinical history of iodoform, as it quiets irritated nerve fiber, ganglia, vaso motor nerves, plexuses, and, removing the irritation, they recover their tone and then do their work. Or, to put it differently, the use of iodoform saves the nerve force by removing the hyperæsthesia, and then the saved nerve force is applied to its legitimate working duty of promoting organization, nutrition, secretion, tone, etc., etc. Our bodies are colonies of organs, managed, controlled, and "run," so to speak, by the normal nervous energies. Use up this force, by having a uterus out of place and diseased, for example, and the nerve force for work is by so much lessened. Save or increase that nerve force by local applications, mechanical procedure, proper feeding, and putting the whole body in prime working condition, then attention is paid by the composite organism to the repairs needed. Why iodoform acts as a nerve sedative, is as difficult to explain as why the protoplasm of the epithelia of the mammary gland secrete milk, and the epithelia of the liver secrete bile. As, however, the epithelia of the mammary gland secrete milk, and the epithelia of the liver secrete bile, and our lives go on without our knowing or caring how these functions are performed, so it seems needless to occupy ourselves with the practical results of iodoform, while we may be lost in wonder at the almost exceptionless benignancy of such a powerful neurotic. It is not cumulative like digitalis, nor poisonous and intoxicating, like opium and chloral, in over doses. It is not even ordinarily escharotic and irritating, as common salt in excess. It agrees with mucous membranes, the most irritable solutions of continuity—the most hyperæsthetic surfaces—and they agree with iodoform. It seems almost impossible that so mild and negative a chemical substance should have such a therapeutic power, though its penetrating smell is so pervading as to impress an observer with a sense of its aerial dispersion, and of the wonderful divisibility of matter. But, as was said at the outset, if the nauseous odor of tobacco is no barrier to its universal use in modern life, it seems to the writer that the unpleasant odor of iodoform should be no bar to its use in gynecology—especially when, with a careful co-employment of absorbent cotton, and capsules of gelatine, the patient may move around in social and domestic life, without evincing the slightest token of its presence in the vagina.

*Other forms of application.* It may be that iodoform, dissolved in collodion, may prove a less odorous agent, but evidently such an application to the os uteri would need the services of a physician, whereas the capsular method is, in the control of the patient.

Dr. Stevens (quoted above) states that he uses



crayons of iodoform, made with gum tragacanth. These he introduces into the uterus, through a speculum.

Dr. Mundé has kindly criticised this paper, as follows: "I have been very well pleased with iodoform in cervical 'ulceration' (ectropium), and, in these respects, quite agree with your experience. Also in chancroids, and, further, have had excellent results with it as a local anæsthetic in utero-pelvic troubles."

It is possible others have had the same experience. If so, it is pleasant to have it confirmed. But if, as the president of this society asserts, this relation is new to most practitioners, then the writer is justified in this presentation. What are societies for but to give opportunities to present one's own practical experience?

May we not express the hope that the near future will see a wider extension of wise mechanical treatment of uterine flexions—to say no more?

NOTE.—At the time when this paper was read, Dr. C. W. Stevens, of Charlestown, Mass., was present and alluded to some crayons of iodoform he used in his practice. His formula was as follows:

R Iodoform, ℥ viij.  
Pulv. gum tragacanth, grs. ʒ6.  
Glycerine.  
Muc. acacia, ℞ q. s.

M. Sig.—Roll into pencils one and one-fourth inches long and one-eighth in diameter. Dry.

But the trouble with the pencils was the smell; so Parke, Davis & Co., at my suggestion, have covered them with gelatine, which isolates the odor, and makes a perfectly elegant crayon for intra-uterine use. Of course the cotton must tampon as before.



FIG. 4. IODOFORM CRAYON.

Finally, T. Metcalf & Co., of Boston, have sent me iodoform gelatine uterine bougies made like the urethral. They are nice, and covered in the gelatine. It would now seem as if perfect odorless iodoform intra-uterine crayons and bougies were presunted by pharmacy to medicine.

